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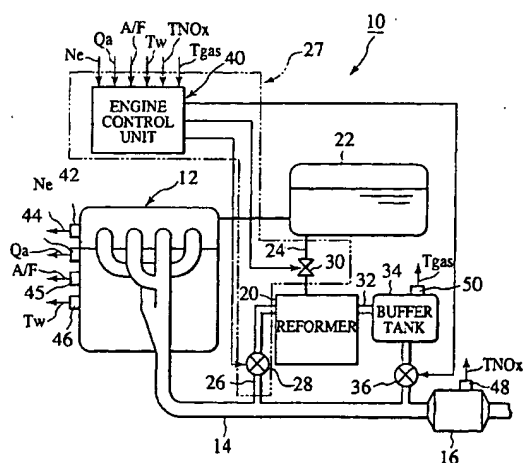
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(54) **Exhaust gas purification apparatus and method**

(57) An exhaust gas purification apparatus and method is applied to an internal combustion engine (12). The internal combustion engine generates an exhaust gas to be introduced to an exhaust system (14) thereof. There is provided a reformer (20) and controller (40). The reformer (20) introduces a fuel and a part of the exhaust gas and generates a reformed gas including at least hydrogen and the controller (40) is programmed to control a fuel supply amount of the fuel introduced to the reformer (20) and an exhaust gas introduction amount of the exhaust gas introduced to the reformer (20) in accordance with a demanded hydrogen amount of the reformer (20) and operating conditions of the internal combustion engine. The exhaust gas is purified while controlling the fuel supply amount and the exhaust gas introduction amount.

FIG.1





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